

BIAM Model School & College, Dhaka
1st Class Test (Half-yearly) - 2026
Class: IX

Subject: **Mathematics**

Time: 1 hour 10 minutes

Full-marks: 30

1. $S = \{x \in \mathbb{N} : x \text{ is prime number and } x^2 \leq 63\}$

$$T = (cx - dy, cd) = (cd, dx - cy)$$

✓ a. Determine the intersection set of all factors of 35 and 45. 2

✓ b. Determine $P(S)$ to show that number of elements of $P(S)$ is 2^n ,

where n is the number of elements of S . 4

c. Determine (x, y) from T according to the condition of ordered pairs. 4

2. $a + b = \sqrt{8}$, $a - b = \sqrt{6}$ and $P = \frac{y^9 + 1}{y^4}$

✓ a. Simplify: $(5x + 7y + 3z)^2 + 2(7x - 7y - 3z)(5x + 7y + 3z) + (7x - 7y - 3z)^2$ 2

✓ b. Determine the value of $24ab(a^2 + b^2)$. 4

c. If $P = m^4 + 4m^2 + 2$ then show that, $y^2 - 1 = my$. 4

3. Short questions:

$$2 \times 5 = 10$$

✓ a. $a^4 + a^2b^2 + b^4 = 6$ and $a^2 - ab + b^2 = 2$. Find the value of $\frac{4}{3}(a^2 + ab + b^2)$.

✓ b. If $p^2 = 13 + \sqrt{168}$, then find the value of p^{-1} .

✓ c. $A = \{y \in \mathbb{N} : y^2 + 3y + 2 = 0\}$ express as tabular method.

✓ d. If $f(a) = \frac{1 - 3a^2 + a^3}{a(1 - a)}$ then show that, $f(1 - a) = \frac{a^3 - 3a + 1}{a(a - 1)}$.

✓ e. If $M = \{2, 3, 5\}$ and $N = \{2, 4, 6\}$, then express the relation

$\{(x, y) : x \in M, y \in N \text{ and } y = 2x\}$ in tabular method.

বিয়াম মডেল স্কুল এন্ড কলেজ, ঢাকা
১ম সিটি পরীক্ষা (অর্ধ বার্ষিক) - ২০২৬

শ্রেণি : নবম

বিষয় : বাংলা প্রথম পত্র

বিষয় কোড : ১০১

সময় : ৬০ মিনিট

পূর্ণমান : ৩০

১. এক কথায় উত্তর দাও।

১×১০=১০

ক) সনেটের ষটকে কী থাকে?

খ) বাংলা কাব্যে সনেট-এর প্রবর্তক কে?

গ) ঈশ্বরচন্দ্র বিদ্যাসাগরের প্রকাশিত শিশুপাঠ্য বইয়ের নাম কী?

ঘ) 'প্রত্ন্যপকার' গল্পটি কোন গ্রন্থ থেকে সংকলিত?

ঙ) 'শুক্লাদ্বাদশী' অর্থ কী?

চ) প্রকৃতি কখন বিজনমূর্তি ধারণ করত?

ছ) রবীন্দ্রনাথ কোন কাব্যের জন্য নোবেল পুরস্কার পান?

জ) সুভার ওষ্ঠাধর ভাবের আভাস মাত্র কিসের মতো কেঁপে উঠত?

→ cheek spelly

ঝ) 'প্রত্ন্যপকার' শব্দের অর্থ কী?

ঞ) “ নাম তার, এ প্রবাসে মজি প্রেম-ভাবে”-এখানে “নাম” বলতে কী বোঝানো হয়েছে?

২. সংক্ষেপে উত্তর দাও।

৫×২=১০

ক. “আমি যদি আজ এরূপ না করিতাম, তবে আমার আর মুখ দেখাইবার উপায় থাকিত না” - বুঝিয়ে লেখো।

খ. ‘দুগ্ধ স্রোতোরূপী তুমি জন্মভূমি-সুনে’—ব্যাখ্যা করো।

গ. খলিফা মামুনের পরিচয় দাও।

ঘ. ‘আমাকে সবাই ভুলিলে বাঁচি।’— সুভার এরূপ মনোভাবের কারণ কী?

ঙ. মেয়েকে সান্তনা দিতে গিয়ে বাণীকণ্ঠের কপোলে অশ্রু গড়িয়ে পড়ল কেন?

৩. রেখো মা দাসেরে মনে, এ মিনতি করি পদে
সাধিতে মনের সাধ ঘটে যদি পরমাদ,
মধুহীন করো না গো তব মন: কোকোনদে।

ক. ‘কপোতাক্ষ নদ’ কোন জাতীয় কবিতা?

১

খ. মাইকেল মধুসূদন দত্ত কেন ভ্রান্তির ছলনায় তাঁর কান জুড়ান?

২

গ. ‘রেখো, মা, দাসেরে মনে, এ মিনতি করি পদে’—এ পঙ্ক্তিতে ‘কপোতাক্ষ নদ’ কবিতার যে ভাবের প্রতিফলন ঘটেছে, তা ব্যাখ্যা করো।

৩

ঘ. ভাবগত সাদৃশ্য থাকলেও প্রকরণগত দিক থেকে উদ্দীপকটি ‘কপোতাক্ষ নদ’ থেকে ভিন্নতর—ওই মন্তব্যের সঙ্গে তুমি কি একমত? এর পক্ষে যুক্তি দাও।

৪

BIAM Model School & College, Dhaka

1st Class Test Examination-2026

Class: IX

Subject - English 1st Paper

Subject Code-107

Time- 1:10 Minutes [Answer all the questions. Figures in the margin indicate full marks.] **Total Marks-30**

Part A : Reading (Marks-20)

Read the passage and answer no 1 & 2.

Meherjan lives in a slum on the Sirajgonj Town Protection Embankment. Her polythene roofed shelter looks like a cage. She is nearly 45 but looks more than her age. In front of her shelter, she is trying to make a fire to cook the day's only meal. Her weak hands tremble as she adds some fallen leaves and straw to the fire. The whispering wind from the river Jamuna makes the fire unsteady. The dancing of the flames reminds Meherjan of the turmoil in her life. Not long ago Meherjan had everything— a family, cultivable land and cattle. The erosion of the Jamuna consumed gradually all her landed property. It finally claimed her last shelter during the last monsoon. It took the river only a day to demolish Meher's house, trees, vegetable garden and the bamboo bush. She had a happy family once. Over the years, she lost her husband and her family to diseases that cruel hunger and poverty brought to the family. Now, she is the only one left to live on with the loss and the pain. The greedy Jamuna has shattered her dreams and happiness. There are thousand others waiting to share the same fate with Meherjan. Bangladesh is land of rivers that affect its people. Erosion is a harsh reality for the people living along the river banks. During each monsoon many more villages are threatened by the roaring of rivers like the Jamuna, the roaring Padma and the Meghna. It is estimated that river erosion makes at least 100,000 people homeless every year in Bangladesh. In fact, river erosion is one of the main dangers caused by climate change. If we can't take prompt actions to adapt to climate change, there will be thousands of more Meherjans in our towns and villages every year.

1×5=5

1. Choose the correct answer from the alternatives.

(a) What does the passage say about Meherjan's appearance?

- (i) She looks younger than her age. ☒ (ii) She looks older than her age.
(iii) She looks healthy. ☐ (iv) She looks content.

(b) What does the passage suggest about the role of climate change?

- (i) It only affects river erosion. ☐ (ii) It causes unpredictable weather.
(iii) It worsens river erosion. ☐ (iv) It is not related to river erosion.

(c) The term "harsh reality" in the passage refers to —

- (i) poverty ☐ (ii) natural disasters ☐ (iii) river erosion ☒ (iv) diseases

(d) What does the phrase "waiting to share the same fate" mean?

- (i) People are optimistic. ☐ (ii) People expect similar suffering.
(iii) People are escaping danger. ☐ (iv) People are preparing for the future.

(e) What is the main lesson from Meherjan's story?

- (i) Rivers should be avoided. ☐ (ii) Action is needed to address climate and erosion issues.
(iii) Poverty is unavoidable. ☐ (iv) Families should stay together.

2×5=10

2. Answer the following questions.

- (a) How much time did river Jamuna take to demolish Meherjan's house? ✓
(b) What has shattered Meherjan's dreams? ✓
(c) For whom is erosion a harsh reality? ✓
(d) In which season does river erosion take a devastating turn? ✓
(e) What is river erosion caused by? ✓

3. Match the parts of sentences given in column 'A', 'B' and 'C' to write five complete sentences.

1×5=5

Column A	Column B	Column C
(a) The role of women in nation building	(i) women were looked upon	(i) to play their active role.
(b) It is not possible for any nation to reach	(ii) the outlook and attitude of the world	(ii) towards women has been changed.
(c) There was a time when	(iii) can not be denied any more	(iii) to serve the family affairs.
(d) They were	(iv) the only instruments	(iv) in the situation of the world.
(e) But with the progress of civilization,	(v) its goal without allowing the women folk	(v) without any dignity and honour.

Part B : Writing (Marks-10)

4. Suppose, you are Sumon/ Sumona. Your friend is Habib/ Habiba. You have got and known the benefits of reading newspaper. Now, write a dialogue between you and your friend about the importance of reading newspaper. 10

Biam Model School and College, Dhaka
C.T Examination – 2026
Class: Nine
Subject: Islam and Moral Education

Time: 1 hour 10 minutes

Lukman, 13 **Full Marks: 30**

1. Answer in one word:

10×1 = 10

- ☒ a) What is the practical meaning of Islam?
- ☒ b) What is the fundamental subject of Iman (faith)?
- ☒ c) What does disbelief (Kufr) create in the human mind?
- ☒ d) How many types of Shirk are there?
- ☒ e) What was the main message of the religion of the Prophets and Messengers?
- ☒ f) Through whom was the completion of the religion declared?
- ☒ g) From which root word is the term "Islam" derived?
- ☒ h) What is morality?
- ☒ i) What is the opposite of a disbeliever (Kafir)?
- ☒ j) What is the meaning of Khatm-e-Nubuwwat (Finality of Prophethood)?

2. Short Questions:

5×2=10

- ☒ a) Why has the religion Islam been named "Islam"?
- ☒ b) Write the seven fundamental articles of Iman (faith).
- ☒ c) "Indeed, Shirk is the greatest injustice" – from which Surah and which verse is this? Explain.
- ☒ d) Why should we believe in Risalat (Prophethood)?
- ☒ e) Explain: Iman and Islam complement each other.

3. Creative Question:

10

Zahid believes that Allah Almighty is the controller of the universe but doubts the eternal life (Hereafter). After hearing this, the Imam of the mosque says that such belief is contrary to Islam. One can be a true believer only by having faith in all the fundamental aspects of Islam.

- a) What is the meaning of the word "Iman"? (1)
- b) Explain: "Islam is a complete code of life." (2)
- c) What aspect is reflected in Zahid's attitude? Explain. (3)
- d) "The Imam's opinion is correct." Analyze. (4)

BIAM Model School and College, Dhaka
CT of Half-Yearly Examination-2026

Class: IX

Subject: Physics

Time: 1:10 minutes

Full Marks: 30

1) Answer the following questions:

10×1=10

- a) Who is known as the father of modern science?
- b) "When the nucleus is broken, the amount of mass that decreases is released as energy" – whose discovery is this?
- c) $1\mu A$ is equal to how many A?
- d) What is the difference between smallest division of main scale and smallest division of vernier scale called?
- e) What is the difference between true value and measured value called?
- f) How many times is the relative error in volume measurement compared to relative error in length measurement?
- g) In SI unit, which quantities are considered as fundamental quantities?
- h) How many meters are there in a light year?
- i) What is the radius of hydrogen atom?
- j) If the main scale reading is 9mm, vernier constant is 0.1mm and vernier superimposition is 3. What is the total reading?

2) Answer the following questions:

5×2=10

3) Write 2 differences between fundamental quantity and derived quantity.

- a) Write 2 differences between slide callipers and screw gauge.
- b) A screw gauge is marked with a least count of 0.01 and has 50 division on its circular scale. Then how many divisions of main scale will the circular scale cross once it rotates completely? 1 division of main scale = 1mm
- c) Why is vernier constant not universal constant?
- d) Check the correctness of the equation $v^2 = u^2 + 2as$ according to the dimensional equation.

4) Creative question:

10

Look at the two figures and answer the questions:

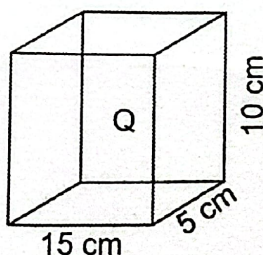


Figure-Q: Solid Object

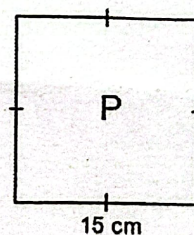


Figure-P: Square Object

- a) What is dimension?
- b) What do you mean by pitch of a screw gauge is 0.01 mm? Explain.
- c) How much relative error in area in P object that is shown in the figure?
- d) How much percentage of error presence in volume in Q object that is shown in the figure?

01

02

03

04

1×15=15

বিয়াম মডেল স্কুল এন্ড কলেজ, ঢাকা
১ম সিটি পরীক্ষা (অর্ধ-বার্ষিক) -২০২৬

শ্রেণি : ৯ম

বিষয় : বাংলা ২য় পত্র

বিষয় কোড : ১০২

সময় : ১ ঘণ্টা

পূর্ণমান: ৩০

ক। এক কথায় উত্তর দাও: $1 \times 10 = 10$

১.ভাষার আঞ্চলিক বৈচিত্র্য কে কী বলে?

২.বাংলা ভাষা কোন ভাষা বংশের সদস্য?

৩. ধ্রুপদী ভাষা বলতে কোন কোন ভাষাকে বুঝানো হয়েছে?

৪.রামমোহন রায়ের রচিত ব্যাকরণের নাম কী?

৫.কারক বিশ্লেষণ ব্যাকরণের কোন তত্ত্বে আলোচিত হয়?

৬.বাগ্যন্তের মধ্যে সবচেয়ে সচল অঙ্গ কোনটি?

৭.ধ্বনি উৎপন্ন হওয়ার প্রত্যঙ্গসমূহকে একত্রে কী বলে?

৮.বাংলাদেশের রংপুর অঞ্চলে কোন উপভাষার ব্যবহার পাওয়া যায়?

৯.বাংলাদেশের দক্ষিণ অঞ্চলের উপভাষার নাম কী?

১০.বাংলা ভাষার সবচেয়ে পুরনো রীতি হলো—

খ) ভাবসম্প্রসারণ করো: ১০

আপনি আচরি ধর্ম শিখাও অপরে ।

গ) সারমর্ম লেখ : ১০

কোথায় স্বর্গ, কোথায় নরক, কে বলে তা বহুদূর?

মানুষের মাঝে স্বর্গ-নরক, মানুষেতেই সুরাসুর।

রিপুর তাড়নে যখনি মোদের বিবেক পায় গো লয়,

আত্মগ্লানির নরক-অনলে তখনি পুড়িতে হয়।

প্রীতি ও প্রেমের পুণ্য বাঁধনে যবে মিলি পরস্পরে,

স্বর্গ আসিয়া দাঁড়ায় তখন আমাদেরই কুঁড়েঘরে।

BIAM Model School and College, Dhaka

Class Test-1 (1st Term) Class-IX-2026

Sub: Bangladesh and Global Studies

Sub: Code:150

Time: 1:10hours

(Chapter-1&6)

Full Marks:30

Part-A: Creative Question:

1×10=10

Event-1: Mr. Ruhul is a responsible citizen of the state A. In recent times, there have been frequent conflicts among people in his area. He formed a special peacekeeping force to maintain peace and order in his area.

Event-2: The people of the state B live peacefully. The state B actively promotes healthcare, female education, work to prevent child marriage and ensures gender equality.

- / a. In which ages the state was considered an organization formed by the God? 1
- / b. Explain rule of law. 2
- / c. What type of work in the state A is similar to Mr. Ruhul's work? Discuss. 3
- / d. The changes in the social conditions of the country depend on the activities of the state B. Evaluate the statement. 4

~~Represented by Mr. Ruhul~~
~~2 people in his area~~

BIAM Model School and College, Dhaka
CT of Half-Yearly Examination-2026

Class: IX
Subject: ICT

Time: 1:10 minutes

Full Marks: 30

A. Answer the following questions:

10×1=10

1. When was Apple Inc. established?
2. In 1842, at which university did Charles Babbage deliver a speech?
3. For what purpose is Facebook used?
4. When was Facebook started?
5. Who first proposed the idea of Internet Protocol?
6. What is the full form of HTTP?
7. Who sent the first message using ARPANET?
8. Who is Mark Zuckerberg?
9. In which year was the microprocessor invented?
10. What is the first operating system developed by Microsoft?

B. Answer the following questions:

10×2=20

1. Write one difference between e-learning and traditional learning
2. Explain the contribution of Charles Babbage.
3. What is email? Write its full form and uses.
4. What is the full form of WWW?
5. What is e-learning? Explain briefly.
6. Write a short note on Steve Jobs.
7. What is the full form of CD-ROM?
8. What is the full form of IEEE?
9. Who first proposed the idea of Internet Protocol?
10. How does ICT help in education?

BIAM Model School and College, Dhaka

1st CT Examination – 2026

Subject: Higher Mathematics.

Class: IX

Subject Code: 126

Marks: 30

Time: 1 Hour and 10 min

[N.B.– The figures in the right margin indicate full marks. Answer the following questions.]

1. $ax^2 + bx + c = 0$ is the quadratic equation.
 - a) Determine the discriminant of the quadratic equation. 2
 - b) If $a = -3$, $b = 7$ and $c = -2$ then solve the quadratic equation using formula. 4
 - c) What is the type and nature of the roots of a quadratic equation depending on the conditions of the discriminant? 4
2. If AD, BE and CF are the medians drawn on side BC, CA and AB respectively of the triangle ΔABC .
 - a) In ΔABC , $\angle C = 90^\circ$ and midpoint of BC is D. Prove that, $AB^2 = AD^2 + 3BD^2$. 2
 - b) If $\angle ACB$ is a right angle and AB hypotenuse of the ΔABC , then prove, $2(AD^2 + BE^2 + CF^2) = 3AB^2$. 4
 - c) If the three medians of ΔABC meet at O, prove that, $AB^2 + BC^2 + AC^2 = 3(OA^2 + OB^2 + OC^2)$. 4

Short Questions.

(5×2=10)

1. Determine the type and nature of the roots of the equation $4x^2 + 2x - 1 = 0$.
2. Define with example: (i) Equation. (ii) Identity.
3. In ΔPQS , $QS = 3RS$, $PS = 4$ cm, and $PR = 5$ cm. What is the length of PQ?
4. Define orthogonal projection of a line segment by drawing a figure.
5. Describe Apollonius's theorem with a figure.

BIAM Model School & College, Dhaka

1st Class Test Examination-2026

Class: IX

Subject - English Second Paper

Subject Code-108

Total Marks-30

Time- 1:10 Minutes [Answer all the questions. Figures in the margin indicate full marks.]

Part A : Grammar (Marks-10)

1. Make five sentences using parts of sentences from each column of the table below.

1×5=5

Sincerity a		indifferent to the importance of sincerity b
A sincere man b	are	properly
The great people .	is .	not aware of its importance b
The people of our country	works	also sincere to their work
They		a great virtue a

2. Transform the following sentences as directed.

1×5=5

- (a) The weather is agreeable. (Negative)
- (b) She was too poor to buy a gift for him. (Negative)
- (c) We all should be responsible. (Negative)
- (d) Hardly had he come when the meeting began. (Affirmative)
- (e) Life is not a bed of roses. (Affirmative)

Part B : Writing (Marks-20)

3. Suppose, you are Tomal/ Toma, a student of class Nine. You have a common room in your school but it has some lack of facilities. Now, write an application to the Principal of school requesting him for increasing the facilities of your school canteen. common room.

10

4. Write a paragraph on Global Warming.

10

BIAM Model School & College, Dhaka
1st Class Test of Half Yearly Examination-2026

Class: IX

Subject: Chemistry (137) Chapter: 01 & 02

Time: 01 Hour 10 minutes

Full marks :30

(N.B.-The figure in the right margin indicate full marks. Read the stems carefully and answer the associated questions)

1. One word questions:

1 × 10 = 10

- i. What is bronze?
- ii. What is the melting point of Ice?
- iii. Write the chemical formula of camphor?
- iv. What is melting?
- v. What is the process called when a substance changes into vapor?
- vi. What is the melting point of Urea?
- vii. On what does diffusion and effusion depend?
- viii. What is the third step of the investigation and research process?
- ix. What is the freezing point of water?
- x. The term 'Alchemy' comes from which language?

2. Short questions:

2 × 5 = 10

- i. Between CO and N_2O , which diffuses faster?
- ii. Why does the melting point of the same substance differ from its boiling point?
- iii. Why does the rate of evaporation increase with temperature?
- iv. Why does iodine directly convert into vapor when heated?
- v. Write the steps of the investigation and research process?

3. i) Green Mango → Ripen Mango

ii) Iron → Rust

iii) $Wax + O_2 \rightarrow X + Y + \text{Energy}$

a. What is effusion?

1

b. Why does the temperature not change during the melting of Ice?

2

c. Explain the chemical change of reaction-iii.

3

d. What type of changes are occurred in the reaction -i and reaction ii? -Analyze with logic.

4